

**MBHSR Public Safety Communications Interoperability  
Memorandum of Understanding**

**Section 1.0 Parties**

- (a) This document constitutes an agreement between the following state and local public safety agencies, municipalities and corporations:

**City of Boston**

Boston Police Department

Boston Fire Department

Boston Emergency Medical Services (Boston Public Health Commission)

**Town of Brookline**

Brookline Police Department

Brookline Fire Department

**City of Cambridge**

Cambridge Police Department

Cambridge Fire Department

Cambridge Emergency Communications Department

**City of Chelsea**

Chelsea Police Department

Chelsea Fire Department

**City of Everett**

Everett Police Department

Everett Fire Department

**City of Quincy**

Quincy Police Department

Quincy Fire Department

**City of Revere**

Revere Police Department

Revere Fire Department

**City of Somerville**

Somerville Police Department

Somerville Fire Department

**Town of Winthrop**

Winthrop Police Department

Winthrop Fire Department

**Greater Boston Police Council**

Boston Area Police Emergency Radio Network (BAPERN)

**Massachusetts Bay Transportation Authority (MBTA)**

**Massachusetts Port Authority (Massport)**

**Metro Fire Association**

**Section 2.0 Purpose**

- (a) Background: In the aftermath of September 11, 2001, the United States Department of Homeland Security (DHS) initiated the Urban Area Security Initiative (UASI) to address national security issues on a regional basis. UASI identified communications interoperability, the ability of public safety agencies to talk across disciplines and jurisdictions, as a priority for the nation.
- (b) Purpose
  - i. The purpose of the MBHSR Public Safety Communications Interoperability MOU is to ensure that MBHSR first responders have the ability to share data and communicate at optimal efficiency, in real time, across jurisdictions and disciplines. Increased communications interoperability enables more effective emergency response during day-to-day operations and large-scale events. The mission of the MBHSR communications interoperability project is to improve regional communications interoperability among first responder agencies and improve the efficiency and effectiveness of the region's overall response capabilities.
  - ii. Towards that end, the parties have created a Standard Regional Channel Plan for Communications Interoperability that will allow for other regional agencies to transmit and receive on their licensed frequencies. This plan (as modified and agreed to) with associated radio frequencies is to be installed on all portable, mobile and dispatch center radios as appropriate for the purpose of regional communications interoperability. This document allows for that use and defines the frequencies and policy for use.

**Section 3.0 Authority**

- (a) The U.S. Department of Homeland Security designated Boston a *high-threat* urban area in July 2003 as part of the Office for Domestic Preparedness' (ODP) Urban Area Security Initiative (UASI) grant program. As the core city, Boston oversaw the delineation of the region, and created the Boston Mayor's Office of Homeland Security (MOHS) to integrate and manage all homeland security activities. The UASI region was subsequently named the Metro Boston Homeland Security Region (MBHSR) and consists of nine jurisdictions: Boston, Brookline, Cambridge, Chelsea, Everett, Quincy, Revere, Somerville, and Winthrop.

The MOHS led an effort to develop a Strategic Plan for Communications Interoperability that addresses and prioritizes how the MBHSR can enhance interoperable communications capabilities during response to emergency incidents. The development of standard regional channel plans was identified as Initiative 1B in the MBHSR Communications Interoperability 5-year Strategic Plan.

- (b) This MOU satisfies Federal Communications Commission Part 90 rules for extending license privileges to others by agreement.
- (c) State and Federal agencies may execute this MOU and shall adhere to all herein.
- (d) Non-Governmental entities authorized to operate on public safety communications frequencies by agreement or regulation may execute this MOU and shall adhere to all herein.

#### **Section 4.0 Principles**

The Parties will abide by the following principles:

- (a) That all parties will install or program the entire MBHSR Standard Regional Channel Plan (Attachment A) as provided in the MBHSR Standard Code Plug, without changes, on all public safety radios controlled by them that possess the capability to support it and utilize the channel nomenclature.
- (b) That all parties authorize the emergency use of their licensed frequencies by other MBHSR agencies (parties) as outlined in the MBHSR Standard Regional Channel Plan (Attachment A) according to the Interim Guidelines (Attachment B) and any future Standard Operating Procedures promulgated and agreed to by participating agencies. Each party shall ensure compliance with applicable FCC technical rules and regulations for their own equipment.
- (c) That all parties will utilize their block of assigned radio IDs as put forth by the MBHSR-CIS in consecutive order when possible.
- (d) That all parties will ensure training on and adherence to the Interim Guidelines (Attachment B) and any future Standard Operating Procedures promulgated and agreed to by participating agencies and that they will impose appropriate corrective action on personnel found to be in violation.
- (e) That all parties will implement radio communications procedures for Communications Interoperability Channels consistent with the National Incident Management System (NIMS) and Incident Command System (ICS), to ensure that effective communications processes and systems exist to support a complete spectrum of incident management activities, to include, but not limited to, the following excerpts from the NIMS Incident Management Communications<sup>1</sup> requirements to:
  - i. Individual Jurisdictions  
They will be required to comply with national interoperable communications standards, once such standards are developed. Standards appropriate for NIMS users will be designated by the NIMS Integration Center (NIC) in partnership with recognized standards development organizations (SDOs).
  - ii. Incident Communications  
Incident communications will follow the standards called for under the ICS. The

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<sup>1</sup> NIMS Compliance Document, Chapter 5 “Communications and Information Management”  
([http://www.fema.gov/txt/nims/nims\\_doc3-5.txt](http://www.fema.gov/txt/nims/nims_doc3-5.txt))

Incident Commander (IC) manages communications at an incident, using a common communications plan and an incident-based communications center established solely for use by the command, tactical, and support resources assigned to the incident. All entities involved in managing the incident will utilize common terminology, prescribed by the NIMS, for communications.

- (f) That all parties will ensure that communications operators at dispatch centers monitor appropriate interoperability calling channels. (e.g. BAPERN 3, Metro Red, UCALL)
- (g) That all parties will ensure that interoperability-calling channels are monitored at the Incident Command Post on major incidents requiring significant aid from agencies beyond routine local interoperability. (e.g. BAPERN 3, Metro Red, UCALL)

#### **Section 5.0 Period of Agreement and Modification/Termination**

- (a) This Agreement will become effective as to each party hereto upon the party's execution of this agreement. The Agreement will not terminate, but may be amended at any time by mutual agreement of the parties. Any party may terminate its participation in this Agreement by providing one hundred twenty (120) days written notice to the other parties. In the event this Agreement is terminated, each party shall be solely responsible for the payment of any expenses it incurs.

#### **Section 6.0 Non-Fund Obligor Document.**

- (a) This instrument is neither a fiscal nor a funds obligation document. Any endeavor or transfer of anything of value involving reimbursement or contribution of funds between the parties to this instrument will be handled in accordance with applicable laws, regulations, and procedures or other existing applicable memorandum of understanding or agreement.

#### **Section 7.0 Signatories**

### **ATTACHMENTS**

- A) MBHSR Standard Regional Channel Plan with shared frequencies
- B) Interim Guidelines for Use of the MBHSR Channel Plan

## Attachment A - MBHSR Standard Regional Channel Plan

### Channel Plan Layout

	<b>BAPERN</b>	<b>EMS</b>	<b>Fire</b>	<b>Interoperability</b>	<b>Metro Fire</b>	<b>Police</b>	<b>Local Zone(s)</b>
Channel 1	<i>agency main</i>	<i>agency main</i>	<i>agency main</i>	<i>agency main</i>	<i>agency main</i>	<i>agency main</i>	<i>agency choice</i>
Channel 2	BAPERN 4 Direct	BAMA	Boston 1	BAMA	<i>agency main</i>	Boston CW 1	<i>agency choice</i>
Channel 3	BAPERN 3	BEMS 12	Boston 2	UCALL	Metro Red	Brookline	<i>agency choice</i>
Channel 4	BAPERN 4	BEMS 13	Boston 3	UCALL A Direct	Metro Red Direct	Cambridge	<i>agency choice</i>
Channel 5	BAPERN North	BEMS 14	Boston 4	UTAC 1	Metro Blue	Chelsea	<i>agency choice</i>
Channel 6	BAPERN South	BEMS 16	Brookline	UTAC 1 A Direct	Metro Blue Direct	Everett	<i>agency choice</i>
Channel 7	BAPERN West	Cataldo Ambulance	Cambridge	UTAC 2	Metro Orange	Quincy	<i>agency choice</i>
Channel 8	BAPERN Central	Fallon Ambulance	Chelsea	UTAC 2 A Direct	Metro Orange Direct	Revere	<i>agency choice</i>
Channel 9	BAPERN North West	General Ambulance	Everett	UTAC 3	Metro Green	Somerville	<i>agency choice</i>
Channel 10	MBTA PD 1	Professional Ambulance	Quincy	UTAC 3 A Direct	Metro Green Direct	Winthrop	<i>agency choice</i>
Channel 11	MBTA PD 2	<i>agency main</i>	Revere	Metro Red	Metro White RX	MBTA PD 1	<i>agency choice</i>
Channel 12	MBHSR 1	<i>agency main</i>	Somerville 1	MBHSR 1	MBHSR 1	MBTA PD 2	<i>agency choice</i>
Channel 13	MBHSR 2	<i>agency main</i>	Somerville 2	MBHSR 2	MBHSR 2	BAPERN 3	<i>agency choice</i>
Channel 14	UTAC 1 A Direct	<i>agency main</i>	Winthrop	BAPERN 3	UTAC 1 A Direct	BAPERN 4	<i>agency choice</i>
Channel 15	UTAC 2 A Direct	<i>agency main</i>	Metro Red	BAPERN 4	UTAC 2 A Direct	BAPERN 4 Direct	<i>agency choice</i>
Channel 16	<i>agency main</i>	<i>agency main</i>	<i>agency main</i>	<i>agency main</i>	<i>agency main</i>	<i>agency main</i>	<i>agency choice</i>
<b>Highlighted cells indicate that the channel does not yet exist or is not a UHF frequency. All such channels will be "agency main" as default.</b>							

<b>Key:</b>	
BAPERN - Boston Area Police Emergency Network	BAMA - Boston Ambulance Mutual Aid
MBTA - Metro Boston Transit Authority	BEMS - Boston Emergency Medical Services
MBHSR - Metro Boston Homeland Security Region	

**Attachment A - continued...**

***Channel Plan Technical Parameters***

<b>Channel</b>	<b>Base Transmit Frequency</b>	<b>Mobile Transmit Frequency</b>
BAMA (EMS)	453.1000	458.1000
UCALL	453.2125	458.2125
UCALL A	453.2125	453.2125
Quincy Police	453.2250	458.2250
UTAC 1	453.4625	458.4625
UTAC 1 A	453.4625	453.4625
UTAC 2	453.7125	458.7125
UTAC 2 A	453.7125	453.7125
BEMS 16 (EMS)	453.7750	458.7750
UTAC 3	453.8625	458.8625
UTAC 3 A	453.8625	453.8625
BEMS 13 (EMS)	458.0625	458.0625
Boston Police CW 1	460.3500	465.3500
BEMS 14 (EMS)	460.5250	465.5250
BEMS 12 (EMS)	460.5500	465.5500
Everett Police	470.8125	473.8125
Cambridge Police	470.3125	473.3125
BAPERN North District Tactical	470.4875	473.4875
Somerville Police	470.5375	473.5375
BAPERN 4 Direct	470.5625	470.5625
BAPERN 4	470.5625	473.5625
MBTA PD 1	470.6625	473.6625
BAPERN West District Tactical	470.7375	473.7375
BAPERN 3	470.7875	473.7875
Revere Police	470.8625	473.8625
Chelsea Police	470.8875	473.8875
BAPERN South District Tactical	470.9125	473.9125
BAPERN Central District Tactical	470.9875	473.9875
Brookline Police	471.0125	474.0125
Cambridge Fire	471.3125	474.3125
Winthrop Police	471.7375	474.7375
Professional Ambulance	472.8625	475.8625
BAPERN NorthWest Tactical	482.6875	485.6875
Boston 1 Fire	483.1625	486.1625
Boston 2 Fire	483.1875	486.1875
Boston 3 Fire	483.2125	486.2125
Boston 4 Fire	483.2375	486.2375
Metro Blue	483.2625	483.2625
Metro Blue Direct	483.2625	483.2625
Somerville 2 Fire	483.2625	486.2625
Metro White RX	483.2875	***
Metro Red	483.3125	486.3125
Metro Red Direct	483.3125	483.3125
Somerville 1 Fire	483.3875	486.3875

Brookline Fire	483.4375	486.4375
Quincy Fire	483.5375	486.5375
MBTA PD 2	483.5625	486.5625
Winthrop Fire	483.6375	486.6375
Cambridge EMS	472.5375	475.5375
Chelsea Fire		
Everett Fire		
Revere Fire		
Cataldo Ambulance		
Fallon Ambulance		
General Ambulance		

Highlighted cells indicate that the channel does not yet exist or is not a UHF frequency. All such channels will be "agency main" as default.

### *Channel Plan Recommendations for Existing Radios*

The following are recommendations for existing radios in the MBHSR whose capacity is not great enough to accommodate the regional channel plan:

- 48 Channel Radios – It is recommended that the Interoperability Zone from the MBHSR Channel Plan be included in these radios.
- 16 Channel Radios – It is recommended that the following channels be included in these radios: BAPERN 3, Metro Red and BAMA 15.
- Existing Mobiles – It is expected that each jurisdiction will make a best effort to accommodate the regional channel plan with existing mobile radios which were not replaced in the first round.

## **Attachment B - Interim Guidelines for Use of the MBHSR Channel Plan**

- Users are only permitted to transmit on channels they have been assigned to by a control point or in the case of no control point, their Incident Commander.
- All transmission within the standard regional channel plan other than the users home frequency must use a call sign including city, agency and user assigned ID.
- All transmissions on frequencies not controlled by the user's agency must follow the policies and procedures set forth by the channel's control point.
- Control points may authorize other agencies and their personnel to transmit on their frequencies.
- Incident Commanders must seek approval from the channel's control point to transmit or allow others to transmit for the purpose of interoperability.
- Use of any of these frequencies must adhere to the principles of the National Incident Management System and the Incident Command System.